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HISTORIOGRAPHY OF TECHNOLOGY (*see also* BIBLIOGRAPHY; INDUSTRIAL ARCHAEOLOGY; *and* MUSEUMS): Baker, *New and Improved: Inventors and Inventions That Have Changed the Modern World,* (R) 697; Carver, "*Tekhnologicheskii zhurnal:* An Early Russian Technoeconomic Periodical," 622; Corning Museum of Glass, *Journal of Glass Studies,* (R) 746; Fleming and Bailyn, eds., *Perspectives in American History,* Vol. 9, (R) 532; Hall and Smith, eds., *History of Technology: First Annual Volume, 1976,* (R) 738; Hausen and Rurup, *Moderne Technikgeschichte,* (R) 736; Hindle, *Early American Science,* (R) 534; Jenkins, "Photographica: The Artifacts of Photography," 231; Mayr, ed., *Philosophers and Machines,* (R) 89; Miles, ed., *American Chemists and Chemical Engineers,* (R) 557; Niederheumer, ed., *Blätter für Technikgeschichte,* (R) 742; Pacey, *The Maze of Ingenuity: Ideas and Idealists in the Development of Technology,* (R) 86; Reingold, ed., *The Papers of Joseph Henry,* Vol. 2, (R) 101, ed., *Science in America since 1820,* (R) 98; Rossiter, "The Charles Chandler Collection," 222; Sande, *Industrial Archaeology,* (R) 571; Tarr, "Retrospective Technology Assessment: Carnegie-Mellon University, December 2–4, 1976," 655; West, ed., *Knowledge and Power: Lectures by F. R. Jevons,* (R) 723; Wittlin, *Museums: In Search of a Usable Future,* (R) 148
A History of Building Types, N. Pevsner, (R) 239
A History of Engineering and Science in the Bell System: The Early Years (1875–1925), M. S. Fagen, ed., (R) 113
History of Public Works in the United States, 1776–1976, E. L. Armstrong, ed., (R) 248
History of Technology: First Annual Volume, 1976, A. R. Hall and N. Smith, eds., (R) 738
A History of Tramways from Horse to Rapid Transit, R. J. Buckley, (R) 102
Ho. P.-T., The *Cradle of the East: An Enquiry into the Indigenous Origins of Techniques and Ideas of Neolithic and Early Historic China, 5000–1000 B.C.,* (R) 80
Hobsbawm, E. J., *The Age of Capital, 1848–1875,* (R) 256
Hohenberg, P. M., and Krantz, F., eds., *Failed Transitions to Modern Industrial Society: Renaissance Italy and 17th-Century Holland,* (R) 94
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Hydraulics in the United States, 1776–1976, H. Rouse, (R) 693

The Ideal of the Practical: Colombia's Struggle to Form a Technical Elite, F. Safford, (R) 142

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Illich, I., *Medical Nemesis: The Expropriation of Health,* (R) 725

Images and Enterprises: Technology and the American Photograph Industry, 1839–1925, R. V. Jenkins, (R) 107

The Incompleat Chemist, J. Eklund, (R) 95

INDUSTRIAL ARCHAEOLOGY (*see also* ARCHAEOLOGY *and* HISTORIOGRAPHY OF TECHNOLOGY): Historic American Engineering Record, *Eli Whitney Armory Survey,* (R) 146; Sande, *Industrial Archaeology,* (R) 571

Industrial Archaeology, T. A. Sande, (R) 571

INDUSTRIAL DEVELOPMENT (*see also* DEVELOPMENT AND ECONOMICS): Allinson, *Japanese Urbanism: Industry and Politics in Kariya, 1872–1972,* (R) 257; Ault and Schallenberg, "Raw Materials Supply and Technological Change in the American Charcoal Iron Industry," 436; Barraclough, *Sheffield Steel,* (R) 244; Boeri and Gibson, *"Tell It Good-bye, Kiddo": The Decline of New England Offshore Fishery,* (R) 716; Brittain and McMath, "Engineers and the New South Creed: The Formation and Early Development of Georgia Tech," 175; Burg, *Chicago's White City of 1893,* (R) 250; Davies, *Peacefully Working to Conquer the World: The Singer Sewing Machine in Foreign Markets, 1854–1920,* (R) 700; Dawley, *Class and Community: The Industrial Revolution in Lynn,* (R) 545; *Electrification by GE,* (R) 554; Erb and Kallab, eds., *Beyond Dependency: The Developing World Speaks Out,* (R) 582; Grant, *Yankee Dreamers and Doers,* (R) 253; Greenslade, *The Victoria History of the County of Stafford,* (R) 526; Jenkins, *Images and Enterprises: Technology and the American Photographic Industry, 1839–1925,* (R) 107; Leary, *The Dragon's Wings,* (R) 120; Rossiter, "The Charles F. Chandler Collection," 222; Solber, *Oil Power,* (R) 113; Taylor, *Timber: History of the Forest Industry in British Columbia,* (R) 573; Webster, *Industrial Imperialism in Italy, 1908–15,* (R) 144

INDUSTRIAL ENGINEERING; *see* MANUFACTURING

Industrial Imperialism in Italy, 1908–15, R. Webster, (R) 144

INNOVATION (*see also* INVENTION *and* RESEARCH AND DEVELOPMENT): Berliner, *The Innovation Decision in Soviet Industry,* (R) 733; Gatovskii, *Nauchno-tekhnicheskii progress i ekonomika razvitogo sotsializma* [Scientific-technical progress and the economics of developed socialism], (R) 261; Hausen and Rurup, *Moderne Technikgeschichte,* (R) 736; Hughes, "Conceptual Definitions: Order out of Chaos," 512; Massouh, "Innovations in Street Railways before Electric Traction: Tom L. Johnson's Contributions," 202; Mensch, *Das technologische Patt: Innovationen überwinden die Depression,* (R) 103; Meursinge, "Short- versus Long-term Patterns," 508; Roland, "Problems of Definition," 509

The Innovation Decision in Soviet Industry, J. S. Berliner, (R) 733

Inouye, A., and Süsskind, C., "'Technological Trends and National Policy,' 1937: The First Modern Technology Assessment," 593

INSTRUMENTS (*see also* MACHINERY AND TOOLS): Bryden, *Scottish Scientific Instrumentmakers, 1600–1900,* (R) 694; Gibbs, *Greek and Roman Sundials,* (R) 238; Jenkins, *Images and Enterprise: Technology and the American Photographic Industry, 1839–1900,* (R) 231; Kren, "The Traveler's Dial in the Late Middle Ages: The Chilinder," 419; Niederheumer, ed., *Blätter für Technikgeschichte,* (R) 742; Nuttall, "Edinburgh and Medicine," 666; Roberts, *Eli Terry and the Connecticut Shelf Clock,* (R) 695; Webster, *Astrolabe Kit* and *The Astrolabe: Some Notes on Its History,* (R) 151

Internal Fire, C. L. Cummins, Jr., (R) 703

"International Research Conference on the History of Computing, Los Alamos, June 10–15, 1976," J. G. Brainerd, 218

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lems of Definitions," 509; Vanderbilt, *Inventing: How the Masters Did It,* (R) 105

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Jeremy, D. J., "The Textile Machinery Collection, Science Museum (London)," 70
Johnson, F.; *see* Hornung, C. P.
Jones, A. F., *The Art of Paul Sawyer,* (R) 565
Journal of Glass Studies, Corning Museum of Glass, (R) 746

Kahn, H.; Brown, W.; and Martel, L., *The Next 200 Years: A Scenario for America and the World,* (R) 585
Kallab, V.; *see* G. F. Erb
Kapstein, E. B., (R) Boeri and Gibson, *"Tell It Good-bye, Kiddo": The Decline of the New England Offshore Fishery,* 716
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Kasson, J. F., *Civilizing the Machine: Technology and Republican Values in America, 1776–1976,* (R) 250
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Knowledge and Power: Lectures by F. R. Jevons, C. E. West, ed., (R) 723
Kobayashi, T., (R) Allinson, *Japanese Urbanism: Industry and Politics in Kariya, 1872–1972,* 257
Kohlmeyer, F. W., (R) Rasmussen, ed., *Agriculture in the United States: A Documentary History,* 96
Koppes, C. R., (R) Anderson, *Orders of Magnitude: A History of NACA and NASA, 1915–1976,* 558
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Layton, E. T., Jr., (R) Fleming and Bailyn, eds., *Perspectives in American History,* Vol. 9, (R) 532; (R) Mayr, ed., *Philosophers and Machines,* 89; (R) Reingold, ed., *Science in America since 1820,* 98
Leary, W. M., Jr., *The Dragon's Wings,* (R) 120
Leavitt, R., ed., *Artist and Computer,* (R) 569
Lebedev, V. G., and Kushlin, V. I., eds., *The Scientific-Technical Revolution and the Primacy of Socialism,* (R) 576
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LIBRARIES; *see* HISTORIOGRAPHY OF TECHNOLOGY
Lieberstein, S., (R) Afanasyev, *The Scientific and Technological Revolution,* 259; (R) Berliner, *The Innovation Decision in Soviet Industry,* 133; (R) Gatovskii, *Nauchno-tekhnicheskii progress i ekonomika razvitogo sotsializma* [Scientific-technical progress and the economics of developed socialism]. 261; (R) Lebediv and Kushlin, eds., *The Scientific-Technical Revolution and the Primacy of Socialism,* 576

MACHINERY AND TOOLS (*see also* CRAFTS; INSTRUMENTS; MANUFACTURING; *and* MECHANICAL ENGINEERING): Beedell, *Windmills,* (R) 92; Burg, *Chicago's White City of 1893,* (R) 250; Jeremy, "The Textile Machinery Collection, Science Museum (London)," 70; Lewis, The Smithsonian Institution's '1876' Exhibit," 670; Mayr, ed., *Philosophers and Machines,* (R) 89; Niederheumer, ed., *Blätter für Technikgeschichte,* (R) 742; Roberts, *Eli Terry and the Connecticut Shelf Clock,* (R) 695; Torrey, *Wind-Catchers: American Windmills of Yesterday and Tomorrow,* (R) 548
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Major, J. K., (R) Needham, *Science and Civilization in China,* Vol. 5: *Chemistry and Chemical Technology;* pt. 3: *Spagyrical Discovery and Invention,* 728
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MANPOWER (*see also* INDUSTRIAL ENGINEERING): Dawley, *Class and Community: The Industrial Revolution in Lynn,* (R) 545; Form, *Blue Collar Stratification: Autoworkers in Four Countries,* (R) 124; Goldin, *Urban Slavery in the American South, 1820–1860,* (R) 543; Graebner, *Coalmining Safety in the Progressive Period,* (R) 125; Meakin, *Man and Work: Literature and Culture in Industrial Society,* (R) 563
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MARINE TECHNOLOGY: Boeri and Gibson, *"Tell It Good-bye Kiddo": The Decline of the New England Offshore Fishery,* (R) 716; Prager, ed., *The Autobiography of John Fitch,* (R) 538; Pugsley, *The Works of Isambard Kingdom Brunel,* (R) 529; Roland, "Bushnell's Submarine: American Original or European Import?" 157
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MECHANICAL ENGINEERING (*see also* MACHINERY AND TOOLS; MANUFACTURING; *and* RAILROADS): Beedel, *Windmills,* (R) 92; Cummins, *Internal Fire,* (R) 703; Day, *The Bosch Book of the Motor Car,* (R) 110; Hornung and Johnson, *200 Years of American Graphic Art,* (R) 247; Jeremy, "The Textile Machinery Collection, Science Museum (London)," 70; Ogilvie, *The Riddle of Richard Pearse,* (R) 119; Prager, *The Autobiography of John Fitch,* (R) 538; Roland, "Bushnell's Submarine: American Original or European Import?" 157; Schlaifer and Heron, *Development of Aircraft Engines and Fuels,* (R) 117; Smith, *Man and Water,* (R) 692; Torrey, *Wind-Catchers: American Windmills of Yesterday and Tomorrow,* (R) 548; White, *The Pioneer: Chicago's First Locomotive,* (R) 102; Wilkinson, *Papermaking in America,* (R) 540; Woodward, ed., *Five Centuries of Map Printing,* (R) 91
Medical Nemesis: The Expropriation of Health, I. Illich, (R) 725
MEDICINE AND MEDICAL TECHNOLOGY: Gordon and Fisher, *The Diffusion of Medical Technology,* (R) 727; Illich, *Medical Nemesis: The Expropriation of Health,* (R)

725; Nuttall, "Edinburgh and Medicine," 666

MEDIEVAL TECHNOLOGY: Ashtor, *A Social History or the Near East in the Middle Ages,* (R) 522; Kren, "The Traveler's Dial in the Middle Ages: The Chilinder," 419

Memories of a Mountain Shortline: The Story of the Tallulah Falls Railroad, K. Carver and M. Queen, eds., (R) 553

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Moderne Technikgeschichte, K. Hausen and R. Rurup, (R) 736

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MUSEUMS (*see also* HISTORIOGRAPHY OF TECHNOLOGY): Corning Museum of Glass, *Journal of Glass Studies,* (R) 746; Jeremy, "The Textile Machinery Collection, Science Museum (London)," 70; Lewis, "The Smithsonian Institution's '1876' Exhibit," 670; Nuttall, "Edinburgh and Medicine," 666; Shepard, ed., *Museums Yearbook: 1976,* (R) 150; Wittlin, *Museums: In Search of a Usable Future,* (R) 148

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Museums Yearbook: 1976, V. Shepard, ed., (R) 150

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Nakayama, S.; Swain, D. L.; and Eri, Y., eds., *Science and Society in Modern Japan,* (R) 574

A National Plan for Energy Research, Development and Demonstration, Energy Research and Development Administration, (R) 720

Nauchno-tekhnicheskii progress i ekonomika razvitogo sotsializma [Scientific-technical progress and the economics of developed socialism], L. M. Gatovskii, (R) 261

Needham, J., *Science and Civilization.* Vol. 5: *Chemistry and Chemical Technology;* pt. 3: *Spagyrical Discovery and Invention,* (R) 728

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New and Improved: Inventors and Inventions That Have Changed the Modern World, R. Baker, (R) 697

"New Methods for the Study and Contemporary Aspects of the History of

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News for Everyman: Radio and Foreign Affairs in Thirties America, D. H. Culbert, (R) 713
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Pickett, W. B., "American Technology—Past, Present, and Future: Rose-Hulman Institute, Terre Haute, Indiana, April 1–3, 1976," 651
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